



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,090	02/15/2002	Giovanni M. Agnoli	1968.0040000	8666

7590 10/20/2005

William S. Frommer  
Frommer Lawrence & Haug LLP  
745 Fifth Avenue  
New York, NY 10151

EXAMINER

LIN, KENNY S

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/076,090

Applicant(s)

AGNOLI ET AL.

Examiner

Kenny Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) 11-23 and 34-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 24-32 is/are rejected.
- 7) ☒ Claim(s) 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>all</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-10 and 24-33 are presented for examination. Claims 11-23 and 34-38 are withdrawn.
2. Applicant's election without traverse of Group I, claims 1-10 and 24-33, in the reply filed on 6/13/2005 is acknowledged.
3. The IDS submitted by the applicant have been considered.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 7, 9, 25-26 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Cranor et al (Cranor), US 2003/0112792.
6. As per claim 1, Cranor taught the invention as claimed including a system for publishing transcoded media content, comprising: a publishing service request processor that generates a media provider request based on a requesting client's publishing service request (pp. 0004, 0012-

Art Unit: 2154

0013, 0017-0020); and a media provider farm that receives said media provider request from said publishing service request processor and delivers transcoded media content to fulfill said media provider request (figs. 1-3; pp. 0004, 0012-0013, 0017-0020).

7. As per claim 2, Cranor taught the invention as claimed in claim 1. Cranor further taught that said media provider farm comprises: at least one transcoding server (figs. 1-2; pp. 0012-0013); a media provider request processor that receives said media provider request (figs. 1-2; pp. 0012-0013) and, when indicated by said media provider request, initiates a transcoding task at one of said at least one transcoding server (figs. 1-2; pp. 0012-0013, 0017-0018); and at least one distribution server that distributes said transcoded media content (figs. 1-2; pp. 0012-0013, 0019), wherein said media provider request processor comprises a database containing information about the availability of said at least one transcoding server and said at least one distribution server (pp. 0023, 0029-0038).

8. As per claim 3, Cranor taught the invention as claimed in claim 2. Cranor further taught that said media provider request processor comprises a server load monitor that monitors loading on said at least one transcoding server (pp. 0012, 0023-0024, 0028, 0044).

9. As per claim 4, Cranor taught the invention as claimed in claim 2. Cranor further taught that said media provider request processor comprises a task load monitor that estimates prospective loading on one of said at least one transcoding server, wherein said prospective loading would be attributable to said transcoding task (pp. 0012, 0023-0024, 0028, 0044).

10. As per claim 5, Cranor taught the invention as claimed in claim 2. Cranor further taught a media provider request scheduler that generates a batch media provider request that is received by said media provider request processor (pp. 0004, 0012-0013).

11. As per claim 7, Cranor taught the invention as claimed in claim 2. Cranor further taught that said media provider farm further comprises a cache that stores transcoded media content for subsequent distribution through said at least one distribution server (pp. 0019, 0021).

12. As per claim 9, Cranor taught the invention as claimed including a method of providing transcoded media content to a destination client in response to a publishing service request from a requesting client (pp. 0004, 0012-0013), comprising the steps of: (a) receiving the publishing service request (pp. 0013); and (b) when requested transcoded media content is stored in a cache, (i) generating and sending a media provider request that specifies cache access of the requested transcoded media content (pp. 0013, 0017); (ii) identifying a distribution server (pp. 0013, 0017-0020); (iii) sending a distribution request to the distribution server (pp. 0013, 0017-0020); and (iv) delivering the requested transcoded media content from the cache to the destination client via the distribution server (pp. 0004, 0012-0013, 0019-0020).

13. As per claim 24, Cranor taught the invention as claimed including a method of providing transcoded media content to a destination client in response to a publishing service request from a requesting client, comprising the steps of: (a) receiving the publishing service request; and (b)

Art Unit: 2154

directing the requesting client to an origin server that serves the source media content (pp. 0004, 0012-0013, 0019-0020).

14. As per claim 25, Cranor taught the invention as claimed including a method of providing transcoded media content in response to a batch media provider request, comprising the steps of: (a) receiving the batch media provider request (pp. 0012-0013); (b) selecting a transcoding server based on server load (pp. 0012, 0023-0024, 0028, 0044); (c) sending, to the selected transcoding server, a transcoding task corresponding to the batch media provider request (pp. 0017-0020); (d) transcoding source media content to produce the requested transcoded media content (pp. 0023); and (e) storing the requested transcoded media content in a cache (pp. 0019, 0021).

15. As per claim 26, Cranor taught the invention as claimed in claim 25. Cranor further taught that the batch media provider request is generated by a speculative transcoding manager (pp. 0012-0013).

16. As per claim 29, Cranor taught the invention as claimed in claim 26. Cranor further taught said step (d) comprises transcoding in the absence of real time constraints, to produce higher quality transcoded media content than would be produced otherwise (pp. 0023).

### ***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cranor et al (Cranor), US 2003/0112792, in view of Spencer et al (Spencer), US 2003/0014630.

19. As per claim 6, Cranor taught the invention as claimed in claim 5. Cranor further taught said media provider request scheduler comprises a speculative transcoding manager that identifies source media content to be transcoded (pp. 0012-0013) and identifies a format for the transcoded media content. Cranor did not specifically teach the manager to identify a format for the transcoded media content. Spencer taught to identify a format for transcoding media contents (abstract, pp. 0006, 0010-0012, 0086). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Spencer because Spencer's teaching of formatting the content enables Cranor's method to obtain and format data based on the device-identifying information to ensure the media format is playable at the user playback device (see Spencer's abstract).

20. As per claim 8, Cranor taught the invention substantially as claimed in claim 1. Cranor did not specifically teach said publishing service request processor comprises an intelligent publishing options agent that determines how the transcoded media content is to be published, and generates said media provider request specifying how the transcoded media content is to be published. Spencer taught an intelligent publishing options agent to identify a format for

Art Unit: 2154

transcoding media contents based on the device-identifying information of the destination device (abstract, pp. 0006, 0010-0012, 0086). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Spencer because Spencer's teaching of determining content formats enables Cranor's method to obtain and format data based on the device-identifying information to ensure the media format is playable at the user playback device (see Spencer's abstract).

21. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cranor et al (Cranor), US 2003/0112792, in view of Mohan et al (Mohan), Content Adaptation Framework: Bringing the Internet to Information Appliances published in 1999.

22. Mohan was cited by the applicant in the IDS.

23. As per claim 10, Cranor taught the invention substantially as claimed in claim 9. Cranor did not specifically teach the step of to comprise that: (a) when the requested transcoded media content is not stored in the cache in exactly the requested format, but the same content is stored in the cache in a different format usable by the destination client, (i) generating and sending a media provider request that specifies cache access of the same content in the different format; (ii) identifying a distribution server; (iii) sending a distribution request to the distribution server; and (iv) delivering the same content in the different format from the cache to the destination client via the distribution server. Mohan taught a content adaptation application that when the requested transcoded media content is not stored in the cache in exactly the requested format, but



the same content is stored in the cache in a different format usable by the destination client, (i) generating and sending a media provider request that specifies cache access of the same content in the different format; (ii) identifying a distribution server; (iii) sending a distribution request to the distribution server; and (iv) delivering the same content in the different format from the cache to the destination client via the distribution server (VI. Content Adaptation Applications, pages 2019-2020). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Mohan because Mohan's teaching of using transcoding proxy enables Cranor's method to select a transcoding policy that adapts the content display capabilities of the client device.

24. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cranor et al (Cranor), US 2003/0112792, in view of Spencer et al (Spencer), US 2003/0014630, and Mohan et al (Mohan), Content Adaptation Framework: Bringing the Internet to Information Appliances published in 1999.

25. As per claims 27-28, Cranor taught the invention substantially as claimed in claim 26. Cranor did not specifically teach that the transcoded media content requested in the batch media provider request is selected on the basis of the popularity of previous transcodes and on their destination types or that the transcoded media content requested in the batch media provider request is selected on the basis of a publisher's requirement for publication of the transcoded media content. Spencer taught determine a format for transcoding media contents based on the device-identifying information and the requirement of the destination device (abstract, pp. 0006,

Art Unit: 2154

0010-0012, 0086). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Spencer because Spencer's teaching of determining content formats enables Cranor's method to obtain and format data based on the device-identifying information to ensure the media format is playable at the user playback device (see Spencer's abstract). Cranor and Spencer did not specifically teach that the content request is selected on the basis of the popularity of previous transcodes. However, the concept and advantage of selecting transcoded content by its popularity is well known and expected in the art. Mohan taught a method of transcoding and content selecting by selecting the best content versions for the client (Abstract, Content Adaptation Framework, Content Analysis, Transcoding, Content Selection; pages 2015-2019). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor, Spencer and Mohan because Mohan's teaching of content selection enables Cranor and Spencer's method to increase the compatibility of the system with the transcode content format when no particular transcoding method is instructed in the content request.

26. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cranor et al (Cranor), US 2003/0112792, in view of Kawata et al (Kawata), US 2002/0032777.

27. As per claim 30, Cranor taught the invention substantially as claimed in claim 25. Cranor taught to select a transcoding server based on server load (pp. 0012, 0023-0024, 0028, 0044). Cranor did not specifically teach that said step (b) comprises the step of determining server load by measuring current load on the transcoding server, including estimation of any loads that will

Art Unit: 2154

be incurred after maturation of immature transcoding tasks. Kawata taught to measure current server load including estimation of any loads that will be incurred after maturation of immature transcoding tasks (pp. 0003-0006, 0009, 0058). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Kawata because Kawata's teaching of measuring server load using evaluation table enables Cranor's method to monitor server loads periodically and maintain high overall performance of the servers (see Kawata, pp. 0003-0006).

28. As per claim 31, Cranor and Kawata taught the invention substantially as claimed in claim 30. Kawata further taught that the step of determining the server load further comprises the step of receiving an indication of the load of each mature task (pp. 0003-0006, 0009, 0058).

29. As per claim 32, Cranor taught the invention substantially as claimed in claim 25. Cranor taught to select a transcoding server based on server load (pp. 0012, 0023-0024, 0028, 0044). Cranor did not specifically teach that said transcoder server selection of said step (b) is further based on an estimated load to be created by the transcoding task. Kawata taught to estimate load to be created by the transcoding tasks to maintain high server performance (pp. 0003-0006, 0009, 0058). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cranor and Kawata because Kawata's teaching of measuring server load using evaluation table enables Cranor's method to monitor server loads periodically and maintain high overall performance of the servers (see Kawata, pp. 0003-0006).

*Allowable Subject Matter*

30. Claims 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (Claims 25 and 32).

31. The following is an examiner's statement of reasons for allowance: Claims 33 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art of record fairly teaches or suggests all of the limitations especially the detailed limitations in claim 33 which stated to determine source, destination and server properties, search historical transcode task load data for a closest match, calculate a difference between the transcoding task and the closest match and return a load value or a predetermined conservative load estimate depending on the calculation result.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shaw, US 6,751,673.

Russell et al, US 2002/0069420.

Tadayon et al, US 2002/0184159.

Korst et al, 6,061,732.

Lao et al, US 2002/0116293.

Vange, US 2002/0059170.


33. A shortened statutory period for reply to this Office action is set to expire **THREE MONTHS** from the mailing date of this action.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl  
October 14, 2005



**BUNJOB JAROENCHONWANIT**  
**PRIMARY EXAMINER**